

## REMARKS

This Application has been carefully reviewed in light of the Final Office Action mailed September 18, 2007. At the time of the Final Office Action mailed, Claims 33-44, 46-53, 55, 56, 58-63, 65-70, 72 and 73 were pending in this Application. Claims 33-39 and 46-53 were previously withdrawn from consideration by the Examiner. Claims 45, 54, 57, 64 and 71 were previously cancelled by Applicant without prejudice or disclaimer. Claims 40-44, 55-56, 58-63, 65-70 and 72-73 were rejected. Claims 40, 62, and 73 have been amended to further define various features of Applicant's invention. Applicant respectfully requests reconsideration and favorable action in this case.

### Rejections under 35 U.S.C. § 102

Claims 40, 44, 55-56, 58-59, 61-63, 65-66, 68-70 and 73 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,258,028 issued to Ersek et al. ("Ersek"). Applicant respectfully traverses and submits the cited art does not teach all of the elements of the claimed embodiment of the invention.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "the identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co. Ltd.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

### Claim 40

With regard to claim 40, the Examiner contends that Ersek discloses an injectable composition comprising a flowable matrix (physiologic vehicle 31 along with particles 30) comprising PMMA (particles 30 are disclosed to be PMMA in certain embodiments) and radiopaque tracer particles (particles 30 with radiopaque coating). As stated above, in order to

satisfy the elements of claim 40, the Examiner identifies a single element disclosed in Ersek—particles 30—as a portion of the subject matter alleged to anticipate at least two distinct elements of Applicant’s claims—the flowable matrix and the radiopaque tracer particles. More specifically, the Examiner contends that the particles 30 described in Ersek serve to disclose two separate elements of claim 40—the flowable matrix comprising PMMA and the radiopaque particles in the flowable matrix. Claim 40 recites “a flowable matrix comprising polymethylmethacrylate” and “radiopaque tracer particles in the flowable matrix.” If the element “radiopaque tracer particles,” as used and intended by Applicant, also included particles of PMMA, that claimed element would be redundant to the previously recited element of “a flowable matrix comprising polymethylmethacrylate (PMMA).”

Accordingly, to identify particle 30 described by Ersek as disclosing both the flowable matrix and radiopaque tracer particles recited by claim 40 would be to render the term “radiopaque tracer particles” superfluous. It is a bedrock principle of claim interpretation that where two different terms are both expressly recited in a claim, the terms cannot mean the same thing; otherwise, one of the terms would be superfluous. See *Primos, Inc. v. Hunter’s Specialities, Inc.*, 451 F.3d 841, 848 (Fed. Cir. 2006). As such, it is clear that Applicant intends that the element “radiopaque tracer particles” means something more than merely particles of PMMA, and certainly means something different than the PMMA recited as comprising the flowable matrix claim element. In light of the above-stated canon of claim interpretation, Applicant respectfully submits that the Examiner improperly construes claim 40 in order to support a position where the claim reads on the alleged reference.

In order for Ersek to anticipate claim 40 according to accepted principles of claim interpretation, the Examiner would have to identify that the reference discloses a flowable matrix comprising a physiologic vehicle plus PMMA particles used in an injectable composition, where the composition further comprises particles 30 made of disclosed material other than PMMA. However, Ersek does not disclose such a composition. As a result, Ersek cannot anticipate claim 40 in the manner proposed by the Examiner. Further, it is not enough to allege that the PMMA particles in Ersek may be coated with a radiopaque coating in order to satisfy the “radiopaque tracer particle” in claim 40. Clearly, Applicant intends the flowable matrix and radiopaque tracer

particles claim elements to mean different things, as both elements are expressly and separately recited. Any other interpretation would render a claim term superfluous, which is improper.

Additionally, the presently claimed and cited prior art compositions are not identical, nor are the claim elements described in claim 40 arranged in the prior art reference as required by claim 40. As such, Applicant respectfully submits that the Examiner's contention that Ersek anticipates claim 40 is deficient. For at least the reasons stated above, Ersek cannot anticipate claim 40 because the Examiner has not shown that Ersek identically discloses every element of claim 40 as the elements are presently arranged.

Claim 40 has been amended to further define the features of the invention. Claim 40, as amended, includes elements describing "a settable, flowable matrix comprising polymethylmethacrylate." (emphasis added). Ersek does not disclose a flowable matrix comprising PMMA that is also settable in the manner of a bone cement. Rather, Ersek contemplates the use of physiologic vehicles that are "removed or metabolized." See Ersek, col. 2, ll. 47-54. As such, the physiologic vehicle described in Ersek, which the Examiner analogizes to the claimed flowable matrix, actually teaches away from the settable, flowable matrix now found in amended claim 40. Therefore, Applicant submits that in light of the grounds stated above, in addition to the position that the reference teaches away from the claimed subject matter, Ersek cannot anticipate claim 40 as amended. Applicant submits that claim 40 as amended is in condition for allowance, and requests withdrawal of the rejection.

Claims 41-44, 55-56, 58-61, and 70 depend directly or indirectly from amended claim 40. Applicant repeats and hereby incorporates the remarks made above regarding amended claim 40. For at least these reasons, Applicant respectfully submits that claims 41-44, 55-56, 58-61, and 70 are also allowable over Ersek.

Claim 62

With regard to claim 62, the Examiner contends that Ersek discloses an injectable composition comprising a flowable matrix (physiologic vehicle 31 along with particles 30) comprising PMMA (particles 30 are disclosed to be PMMA in certain embodiments) and radiopaque tracer particles (particles 30 with radiopaque coating). Applicant repeats and hereby incorporates the statements above with regard to claim 40. Specifically, the Examiner's

interpretation of claim 62 would render the element “radiopaque tracer particles” superfluous in that the Examiner alleges the particles 30 described in Ersek satisfy both the flowable matrix and radiopaque tracer particle claim elements. Such an interpretation of claim 62 is improper according to well-established canons of claim interpretation.

Additionally, claim 62 has been amended to now recite “a settable, flowable matrix comprising at least polymethylmethacrylate.” (emphasis added). Applicant repeats and hereby incorporates the above statements with regard to amended claim 40. Specifically, Ersek does not teach a settable matrix; rather, Ersek teaches away from such a composition by describing physiologic vehicles that are “removed or metabolized.” Therefore, Ersek does not disclose all the elements of claim 62 as amended, and cannot anticipate amended 62. Applicant respectfully submits that claim 62 as amended is in condition for allowance, and requests withdrawal of the rejection.

Claims 63, 65-69, and 72-73 depend directly or indirectly from amended claim 62. Applicant repeats and hereby incorporates the remarks made above regarding amended claim 62. For at least these reasons, Applicant respectfully submits that claims 63, 65-69, and 72-73 are also allowable over Ersek.

### **Rejections under 35 U.S.C. §103**

In the alternative to the above rejection, Claims 40-44, 55-56, 58-61, 63, 66, 67 and 72 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ersek. Applicant respectfully traverses and submits the cited art combinations, even if proper, which Applicant does not concede, does not render the claimed embodiment of the invention obvious. Applicant repeats and hereby incorporates the above statements with regards to claims 40 and 62. For at least the reasons discussed above with respect to amended claims 40 and 62, Ersek in combination with the knowledge of one of ordinary skill in the art does not disclose all of the elements of claims 40-44, 55-56, 58-61, 63, 66, 67 and 72 and therefore cannot render those claims obvious.

Claims 40-44, 55-56, 58-59, 62-63, 65-66 and 68-70 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,507,813 issued to Dowd et al. in view of U.S. Patent No. 4,500,658 issued to Fox. Applicants respectfully traverse and submit the cited

art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Dowd describes a shaped material fabricated from bone particles where, in some embodiments, the bone particles are admixed with one or more substances including adhesives, fillers, and the like. The shaped material, as ultimately applied, is described to be in the form of a sheet that may be dried to form a relatively rigid material or that may be wetted to become pliable and flexible. However, Dowd does not describe that the shaped material is injectable, nor is the shaped material flowable during application or implantation. Claims 40 and 62 describe an injectable composition comprising a flowable matrix, wherein the composition flows during implantation. As such, Dowd does not teach all of the elements of claims 40 and 62, and therefore cannot, alone or in combination with Fox, render claims 40 and 62 obvious. Further, Applicant suggests that, for the reasons discussed above, claims 41-44, 55-56, 58-59, 63, 65-66 and 68-70 depend from claims that are in condition for allowance, and are also not rendered obvious by Dowd in light of Fox. Therefore, Applicant submits that claims 40-44, 55-56, 58-59, 62-63, 65-66 and 68-70 are in condition for allowance and requests withdrawal of the rejection.

### CONCLUSION

Applicant has made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicant respectfully requests reconsideration of the pending claims.

Applicant believes there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-0359 of ArthroCare Corporation in order to effectuate this filing.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney at 512.358.5925.

Respectfully submitted  
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